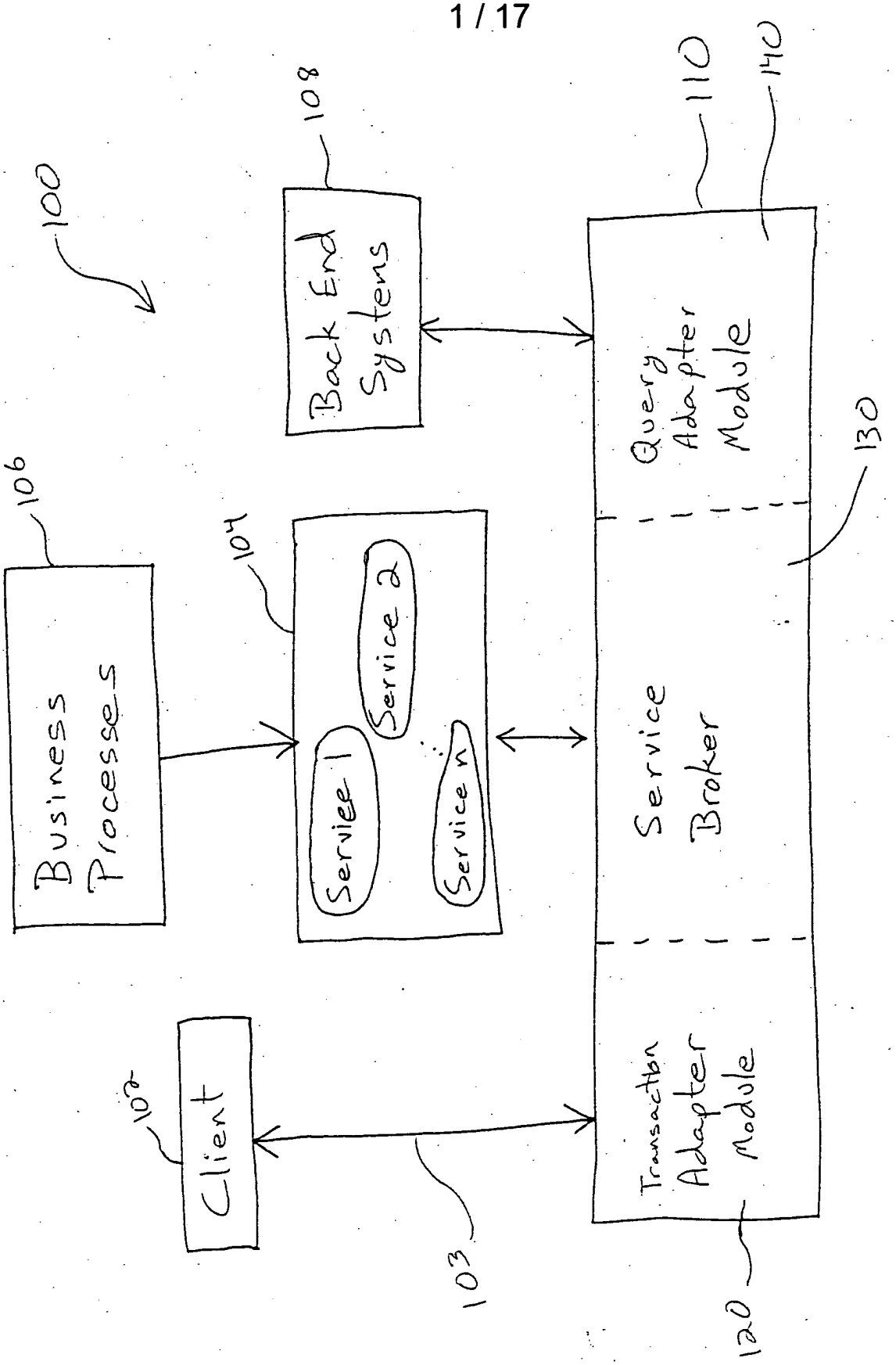

100
108
Back End Systems
110
140
Query Adapter Module
130
106
Business Processes
104
Service 1
Service 2
Service n
Service Broker
102
Client
103
Transaction Adapter Module
120

Figure 1

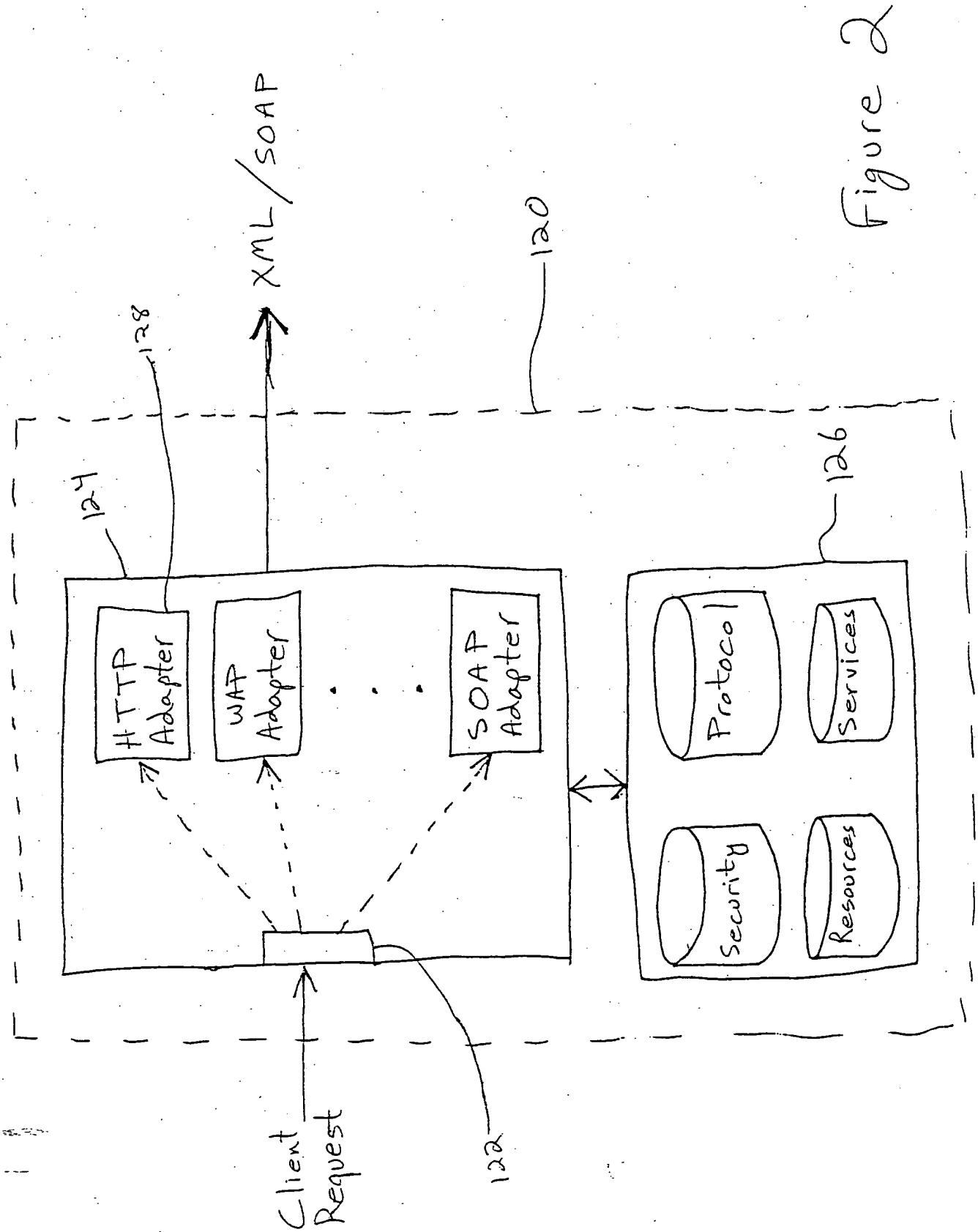
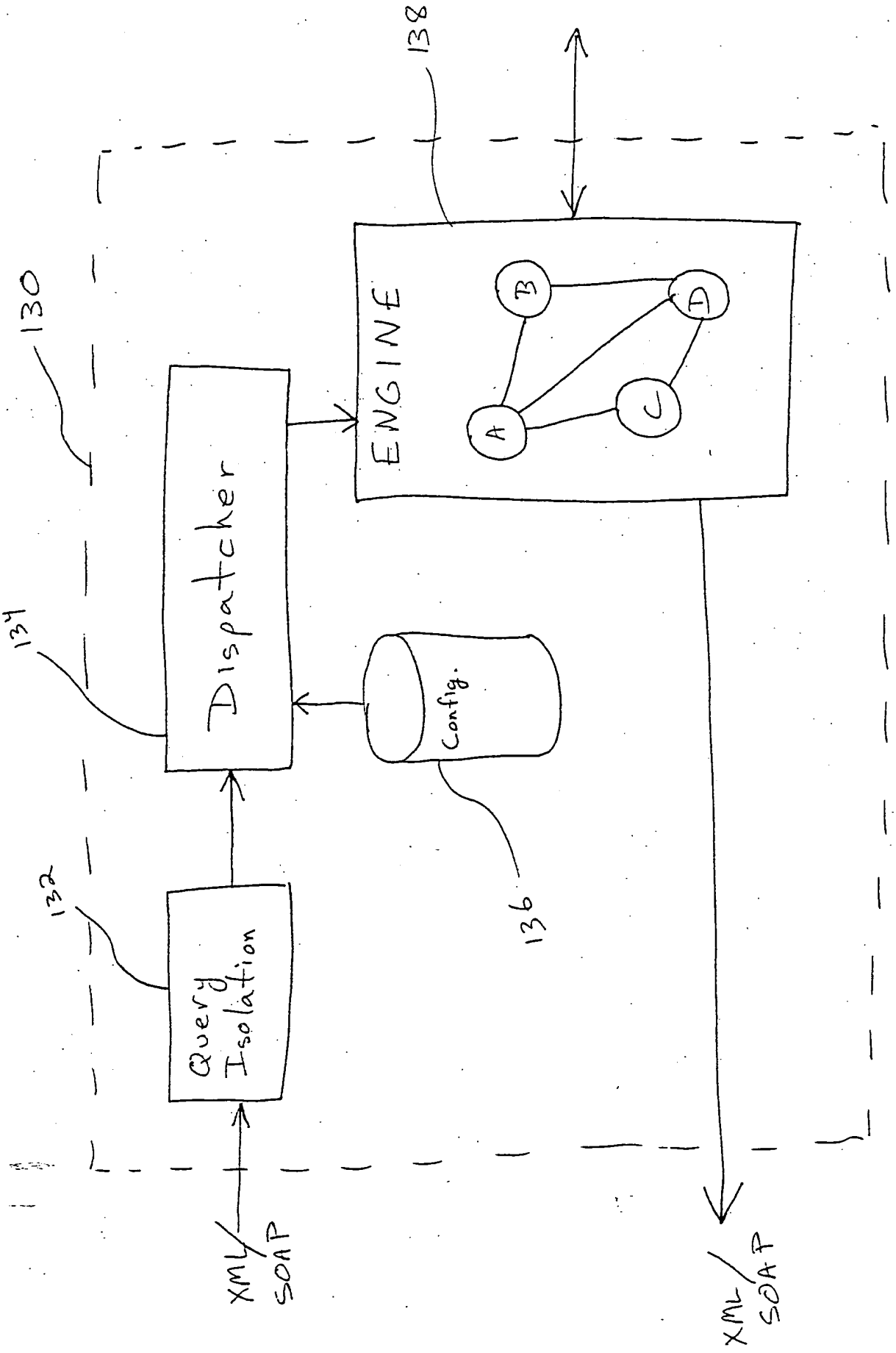

XML/SOAP
120
128
124
126
HTTP Adapter
WAP Adapter
SOAP Adapter
Protocol
Services
Security
Resources
Client Request
122

Figure 2


138
130
ENGINE
B
D
A
C
Dispatcher
134
Config.
136
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Query Isolation
XML/SOAP
XML/SOAP

Figure 3

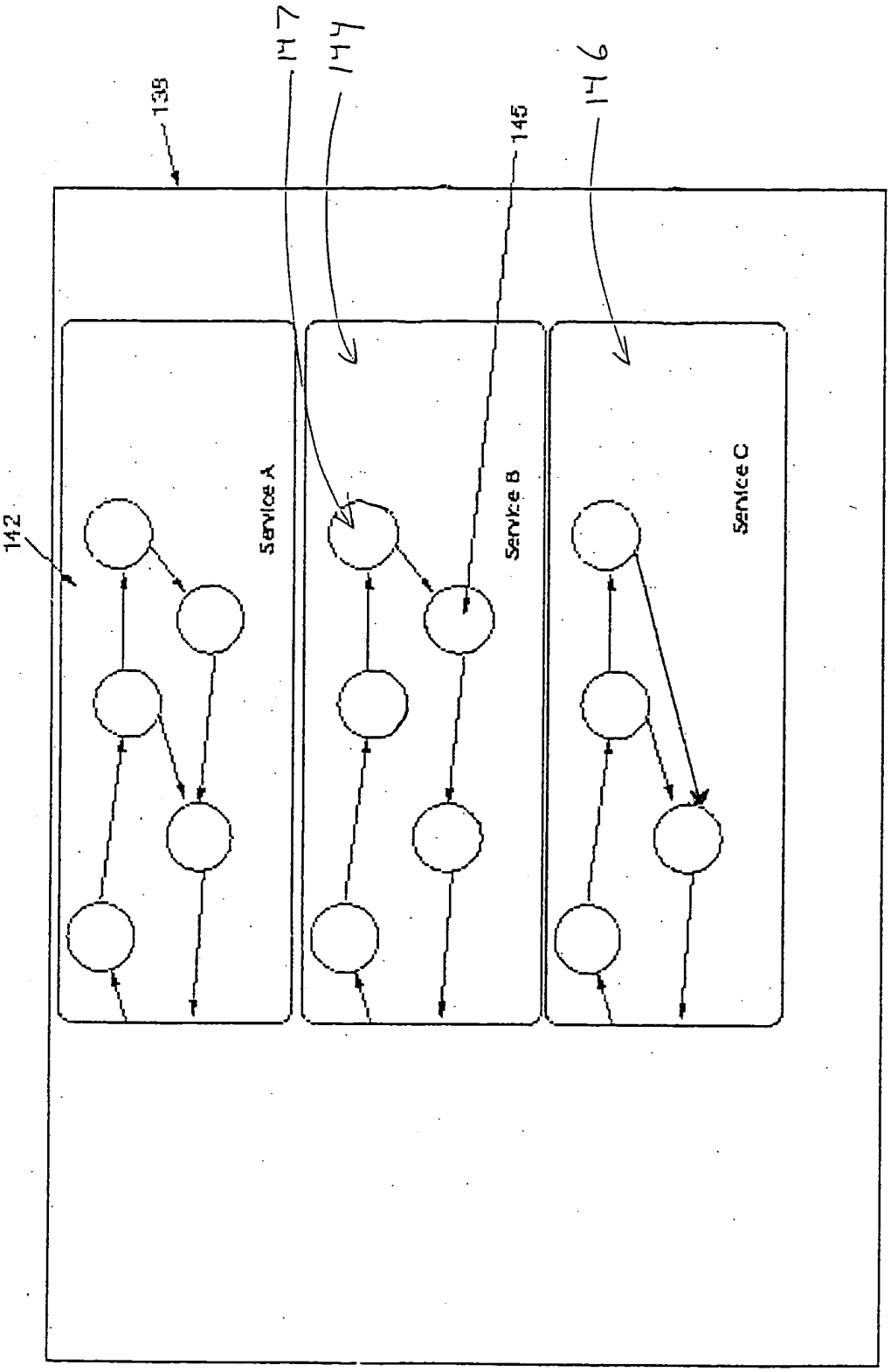


Figure 4

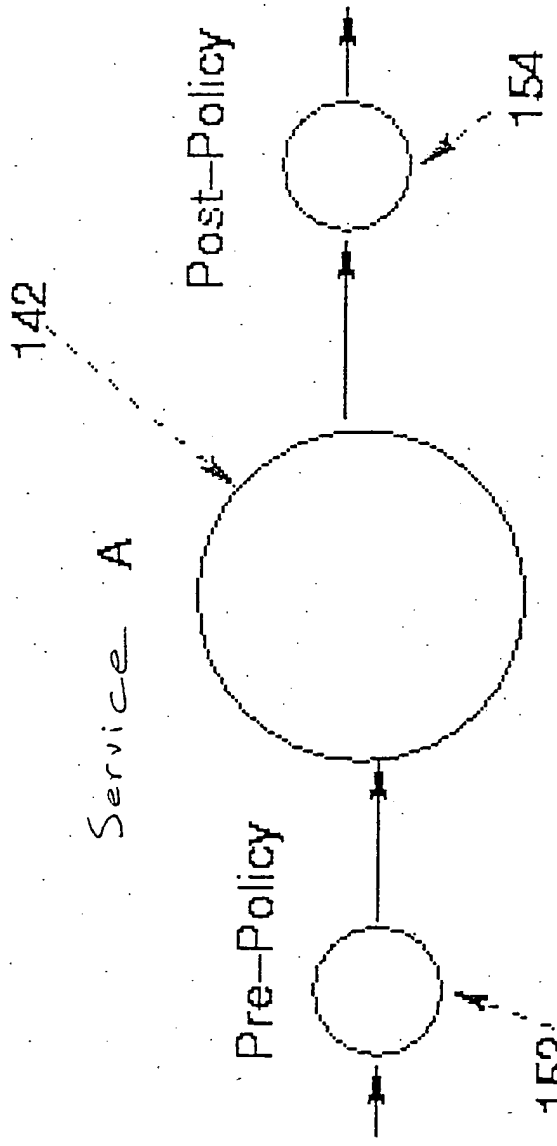


Figure 5

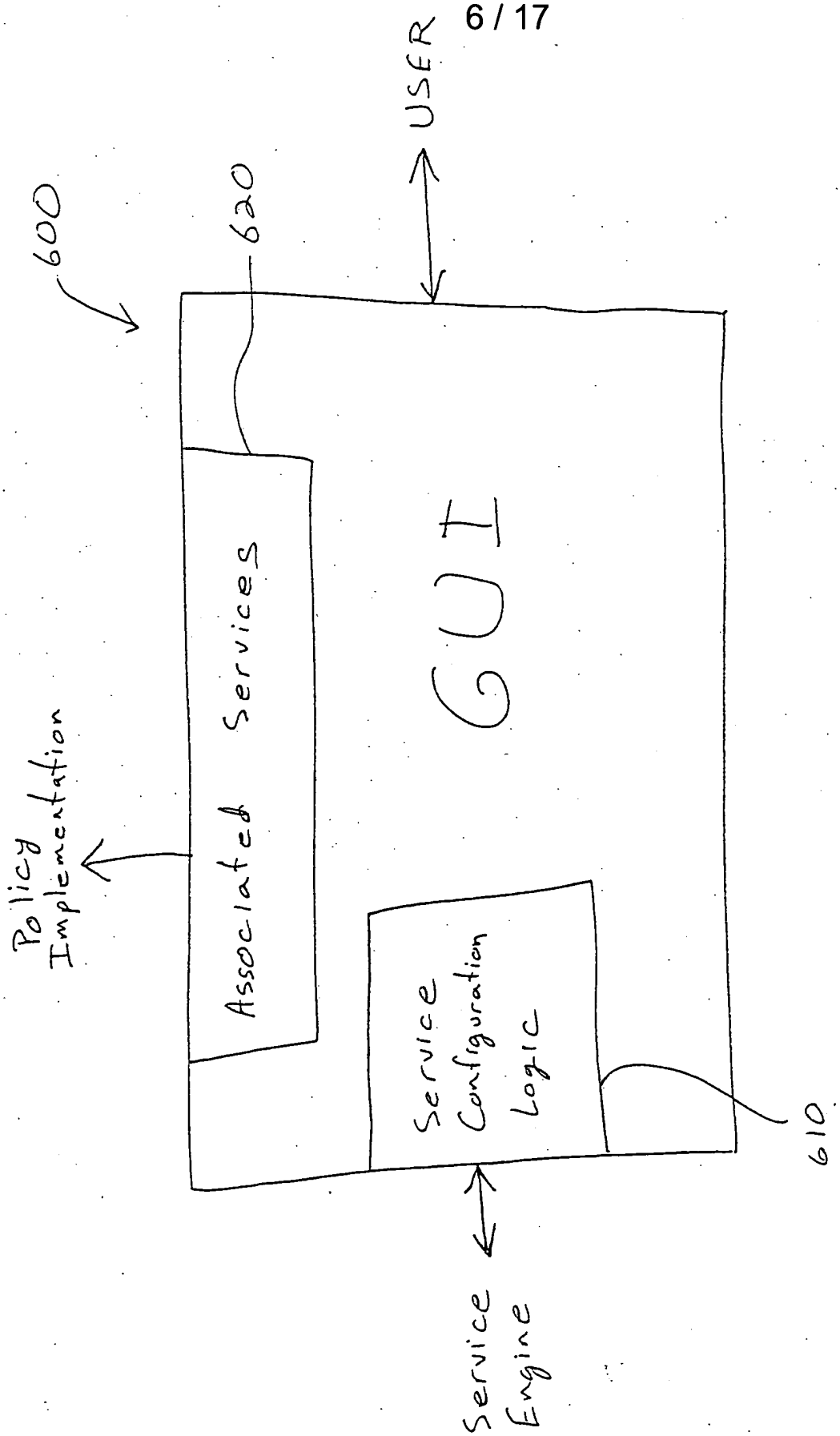

USER
600
620
GUI
Associated Services
Policy Implementation
Service Configuration Logic
610
Service Engine

Figure 6

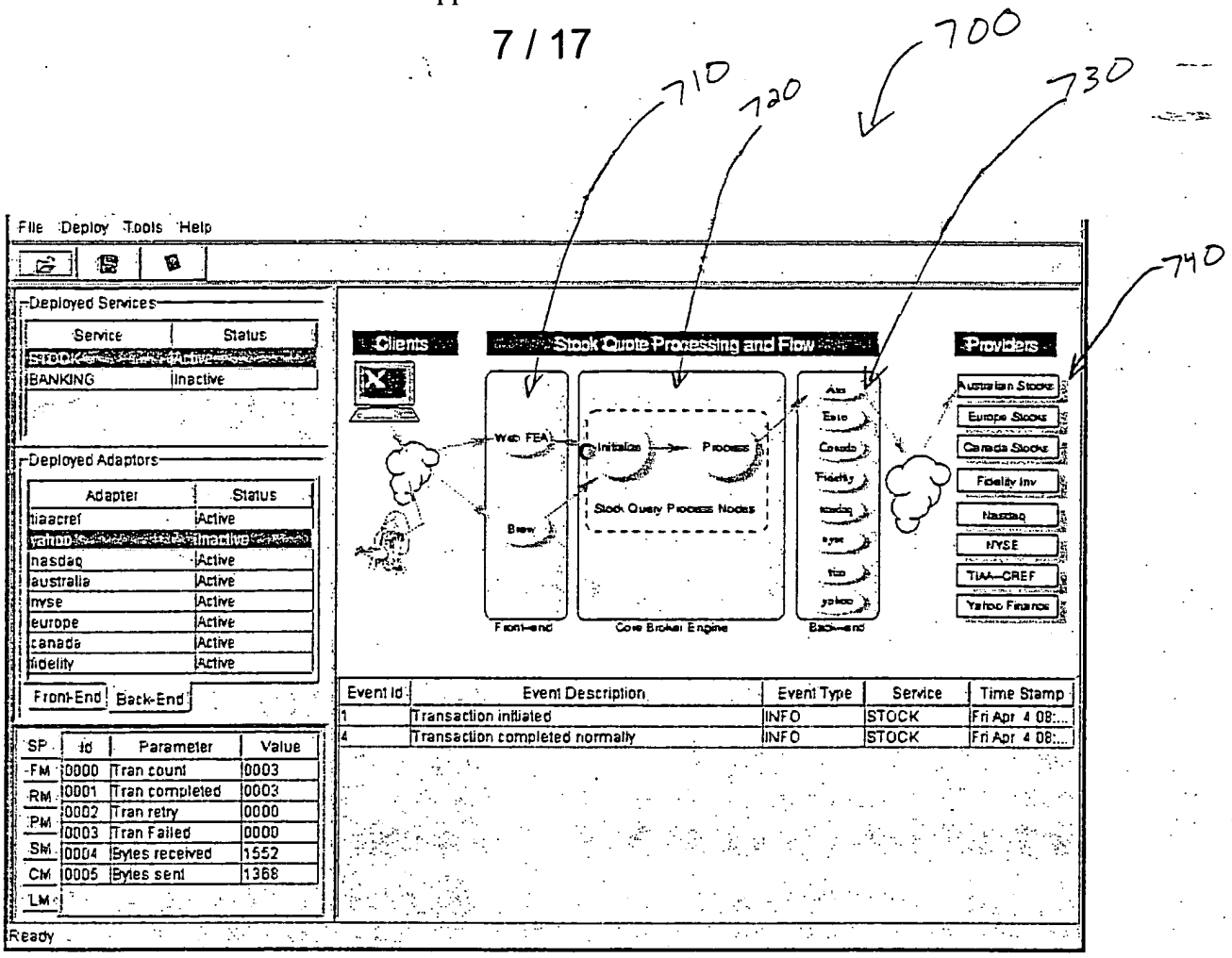

700
710
720
730
740
File Deploy Tools Help
Deployed Services
Service
Status
STOCK
Active
BANKING
Inactive
Deployed Adaptors
Adapter
Status
tiaacref
Active
yahoo
Inactive
nasdaq
Active
australia
Active
nyse
Active
europe
Active
canada
Active
fidelity
Active
Front-End
Back-End
SP
Id
Parameter
Value
FM
0000
Tran count
0003
RM
0001
Tran completed
0003
PM
0002
Tran retry
0000
SM
0003
Tran Failed
0000
CM
0004
Bytes received
1552
LM
0005
Bytes sent
1368
Clients
Stock Quote Processing and Flow
Providers
Web FEA
Brew
Initialize
Process
Stock Query Process Nodes
Front-end
Core Broker Engine
Back-end
Australian Stocks
Europe Stocks
Canada Stocks
Fidelity Inv
Nasdaq
NYSE
TIAA-CREF
Yahoo Finance
Event Id
Event Description
Event Type
Service
Time Stamp
1
Transaction initiated
INFO
STOCK
Fri Apr 4 08:...
4
Transaction completed normally
INFO
STOCK
Fri Apr 4 08:...
Ready

Figure 7A

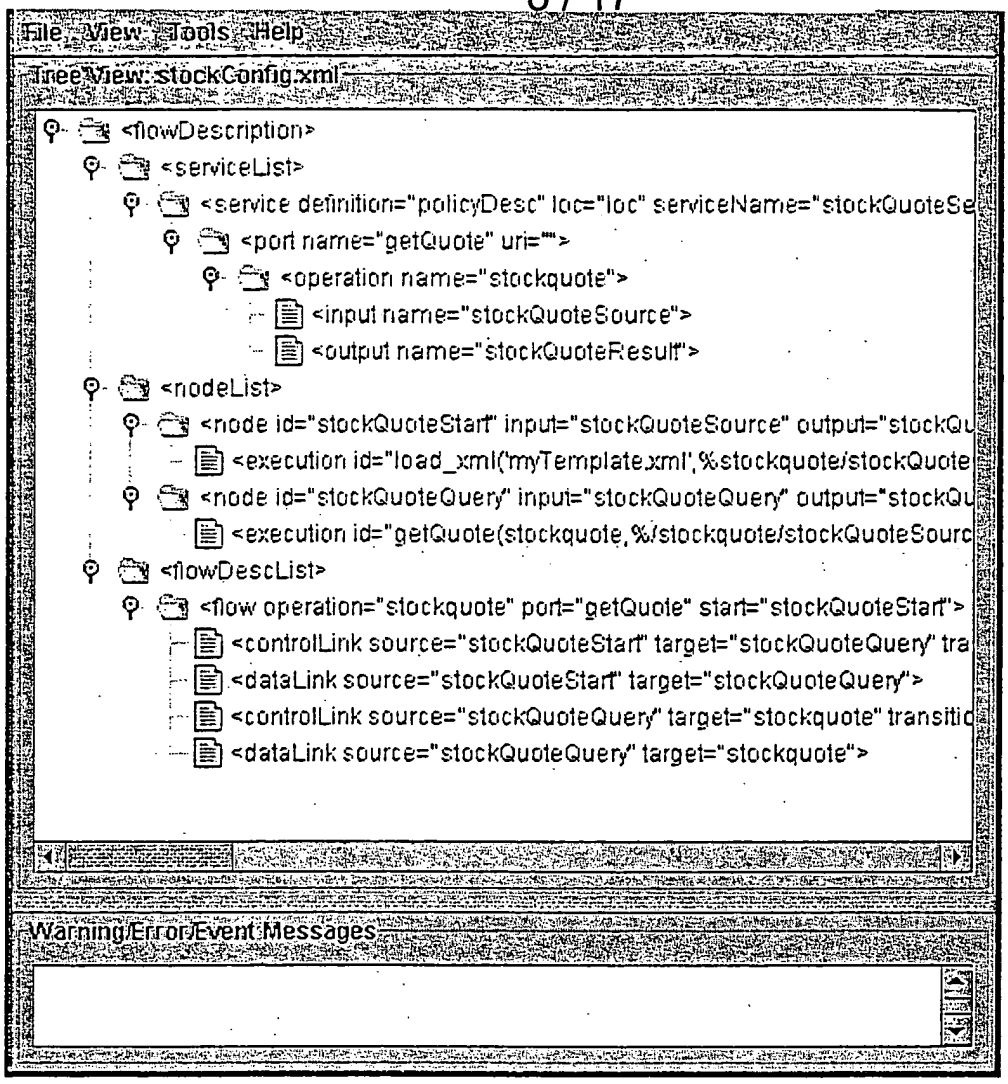

File View Tools Help
Tree View: stockConfig.xml
<flowDescription>
<serviceList>
<service definition="policyDesc" loc="loc" serviceName="stockQuoteSe
<port name="getQuote" uri="">
<operation name="stockquote">
<input name="stockQuoteSource">
<output name="stockQuoteResult">
<nodeList>
<node id="stockQuoteStart" input="stockQuoteSource" output="stockQu
<execution id="load_xml('myTemplate.xml',%stockquote/stockQuote
<node id="stockQuoteQuery" input="stockQuoteQuery" output="stockQu
<execution id="getQuote(stockquote,%/stockquote/stockQuoteSourc
<flowDescList>
<flow operation="stockquote" port="getQuote" start="stockQuoteStart">
<controlLink source="stockQuoteStart" target="stockQuoteQuery" tra
<dataLink source="stockQuoteStart" target="stockQuoteQuery">
<controlLink source="stockQuoteQuery" target="stockquote" transitic
<dataLink source="stockQuoteQuery" target="stockquote">
Warning/Error/Event Messages

Figure 7B

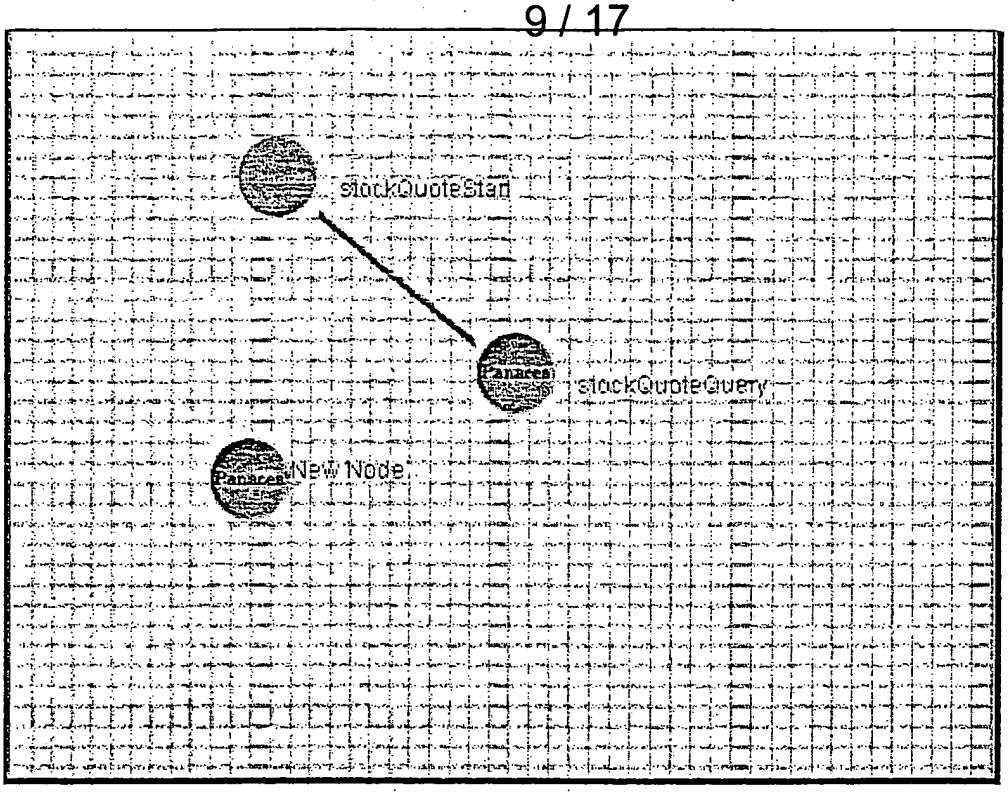


Figure 7C

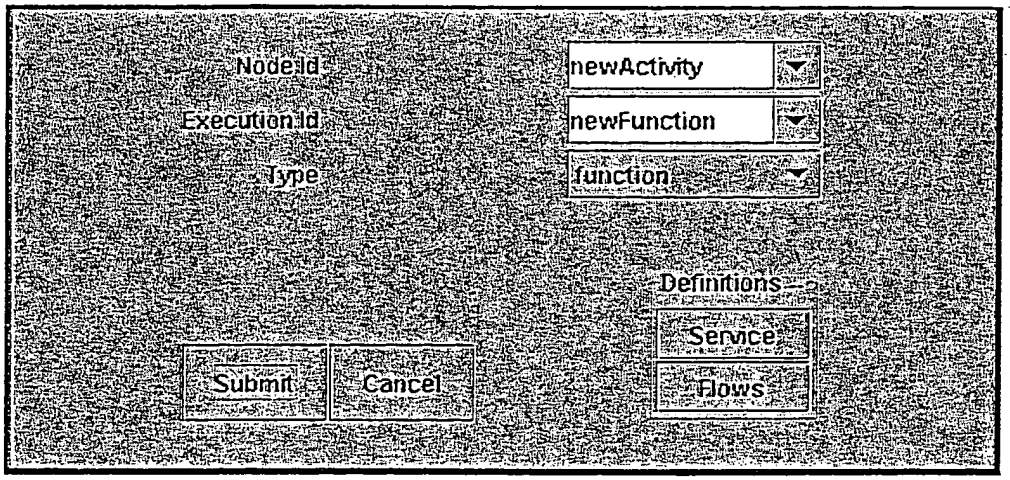


Figure 7D

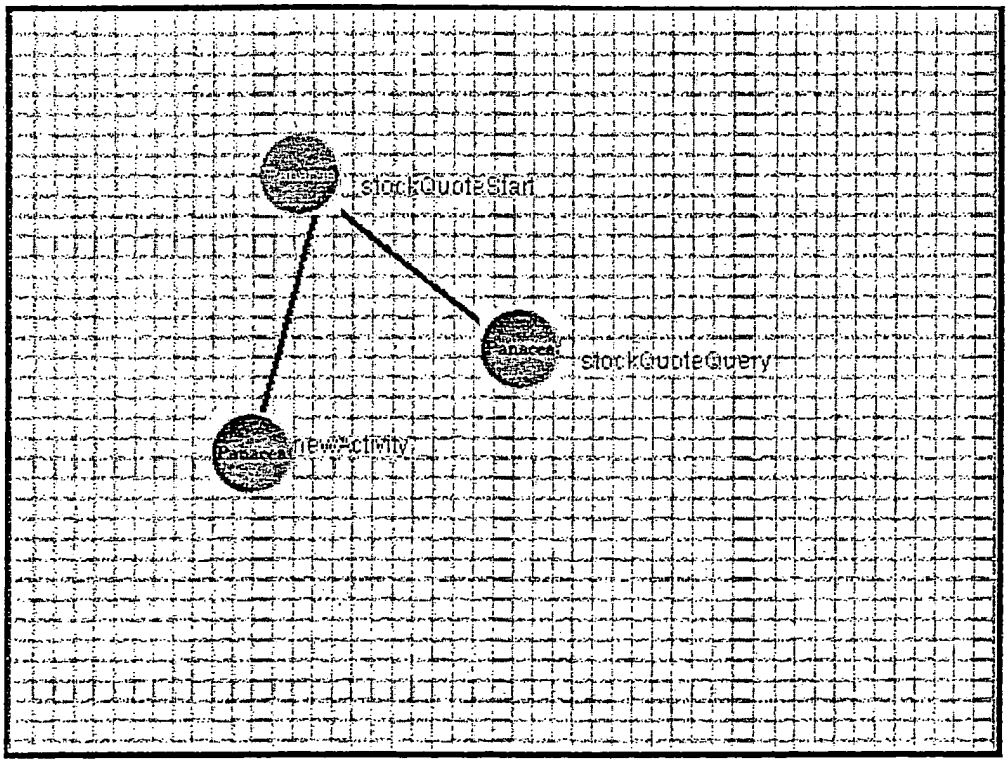
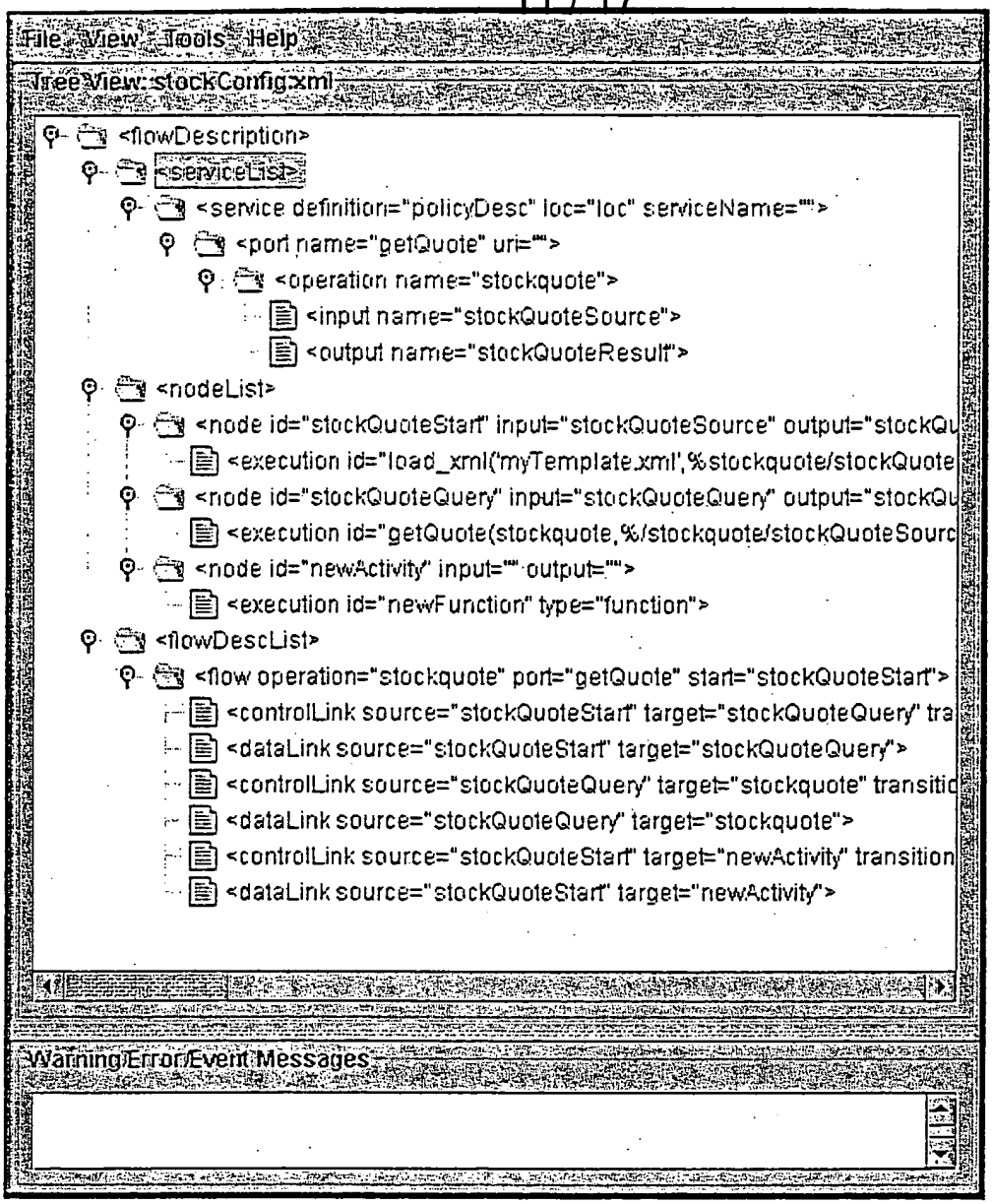


Figure 7E


File View Tools Help
Tree View: stockConfig.xml
<flowDescription>
<serviceList>
<service definition="policyDesc" loc="loc" serviceName="">
<port name="getQuote" uri="">
<operation name="stockquote">
<input name="stockQuoteSource">
<output name="stockQuoteResult">
<nodeList>
<node id="stockQuoteStart" input="stockQuoteSource" output="stockQu
<execution id="load_xml('myTemplate.xml',%stockquote/stockQuote
<node id="stockQuoteQuery" input="stockQuoteQuery" output="stockQu
<execution id="getQuote(stockquote,%/stockquote/stockQuoteSourc
<node id="newActivity" input="" output="">
<execution id="newFunction" type="function">
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<flow operation="stockquote" port="getQuote" start="stockQuoteStart">
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<dataLink source="stockQuoteStart" target="stockQuoteQuery">
<controlLink source="stockQuoteQuery" target="stockquote" transitic
<dataLink source="stockQuoteQuery" target="stockquote">
<controlLink source="stockQuoteStart" target="newActivity" transition
<dataLink source="stockQuoteStart" target="newActivity">
Warning/Error/Event Messages

Figure 7F

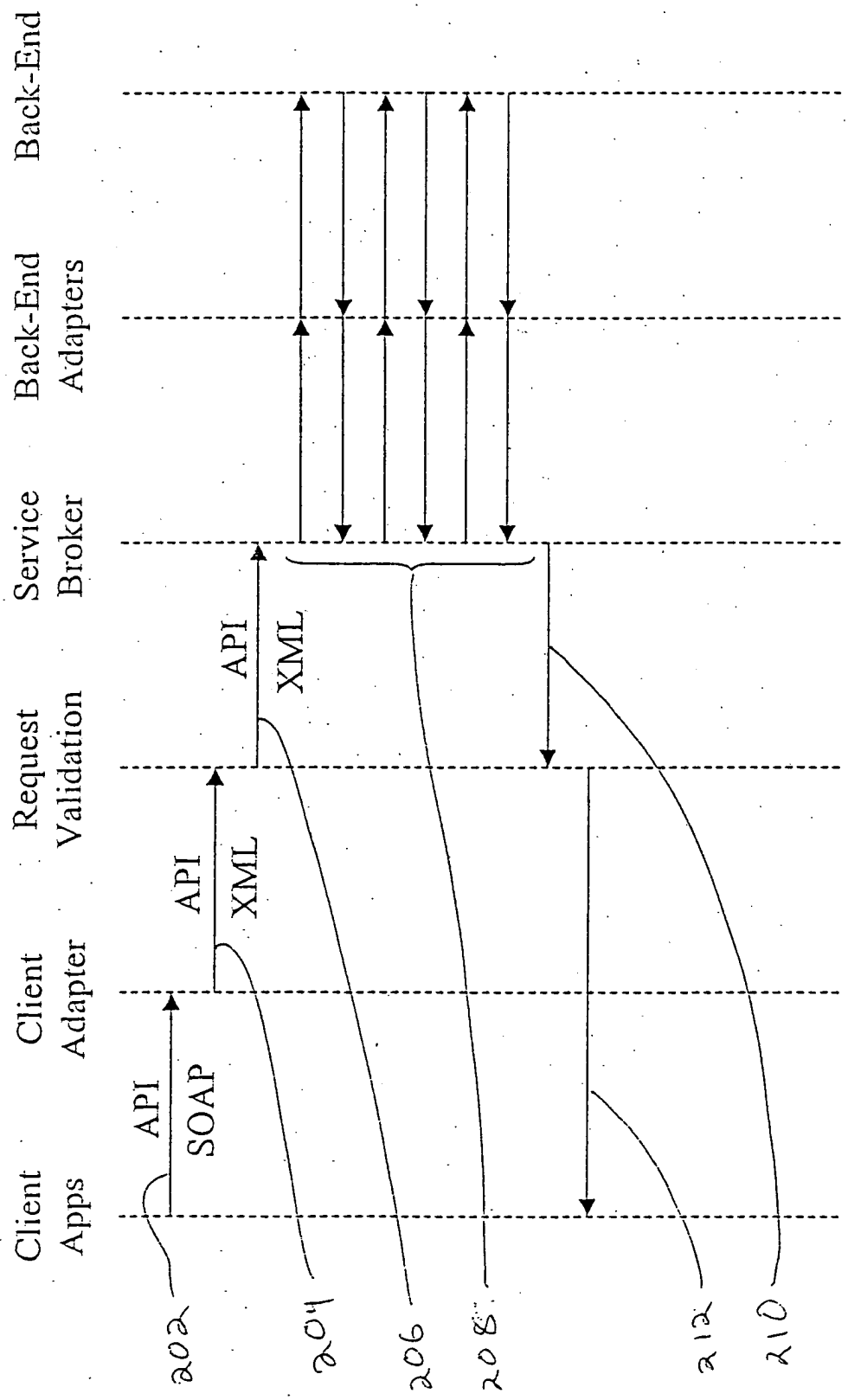
Client Apps
Client Adapter
Request Validation
Service Broker
Back-End Adapters
Back-End
API
SOAP
API
XML
API
XML
202
204
206
208
212
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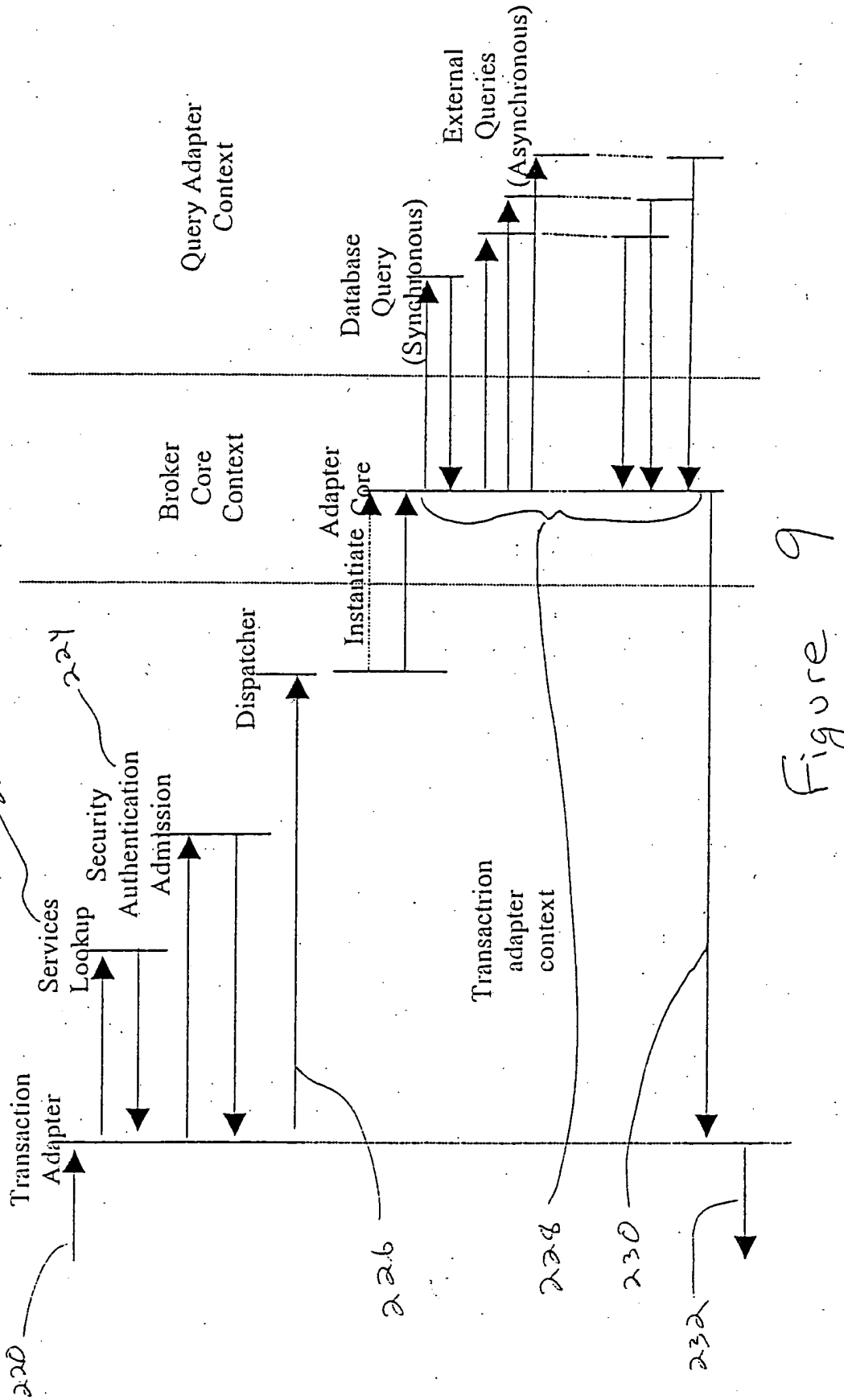
Figure 8


Query Adapter Context
External Queries (Asynchronous)
Database Query (Synchronous)
Broker Core Context
Adapter Core
Instantiate
Dispatcher
224
222
Security Authentication Admission
Services Lookup
Transaction adapter context
Transaction Adapter
220
226
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230
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Figure 9

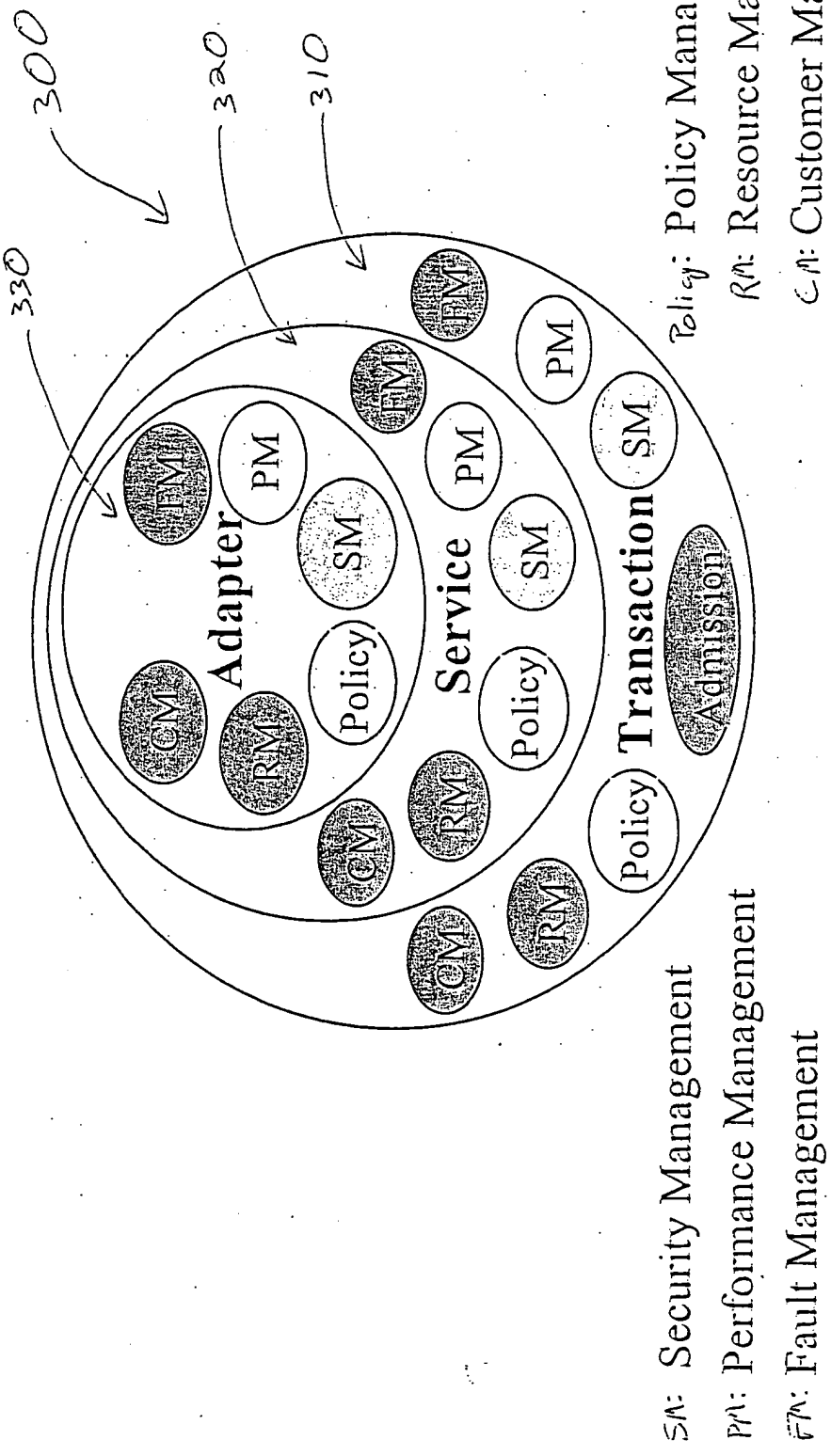
300
320
310
330
Adapter
Service
Transaction
PM
SM
Policy
RM
CM
FM
Admission
SM: Security Management
PM: Performance Management
FM: Fault Management
Policy: Policy Management
RM: Resource Management
CM: Customer Management

Figure 10

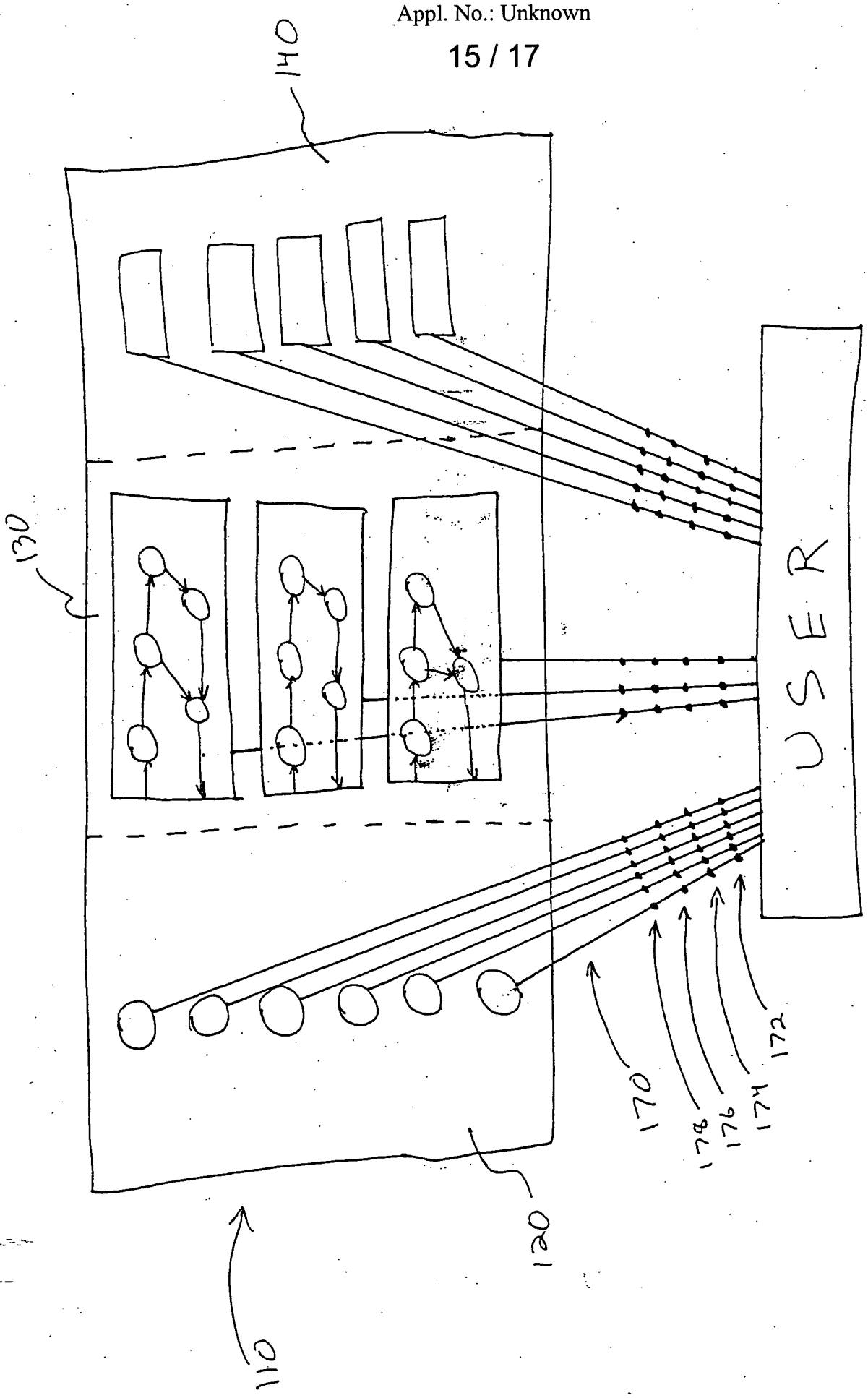

Figure 11

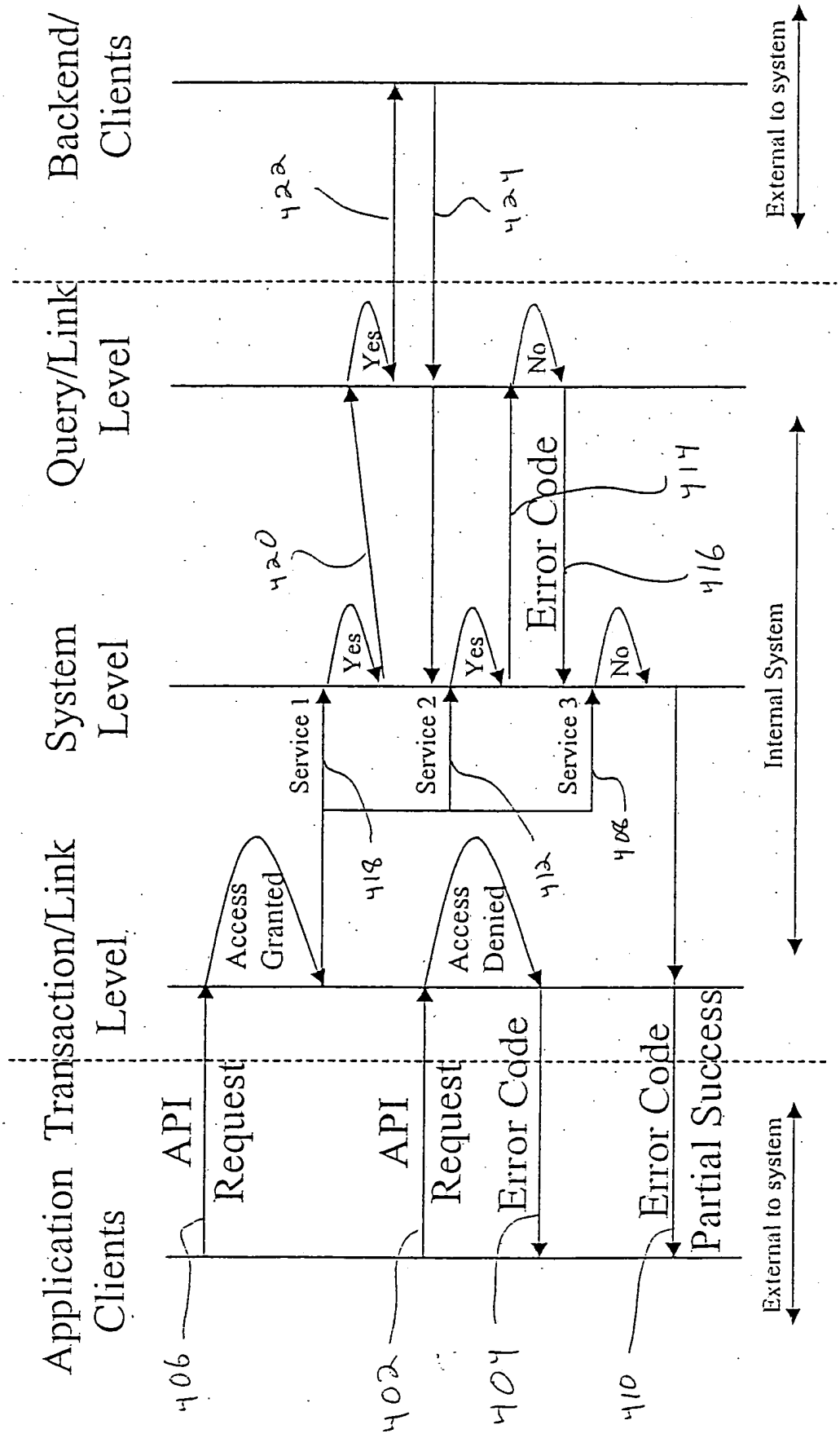
Application Clients
Transaction/Link Level
System Level
Query/Link Level
Backend/ Clients
API Request
Access Granted
Service 1
Yes
Yes
Error Code
No
Service 2
Access Denied
Service 3
Yes
No
Error Code
Partial Success
External to system
Internal System
External to system
406
402
404
410
418
412
408
420
416
414
422
424

Figure 12

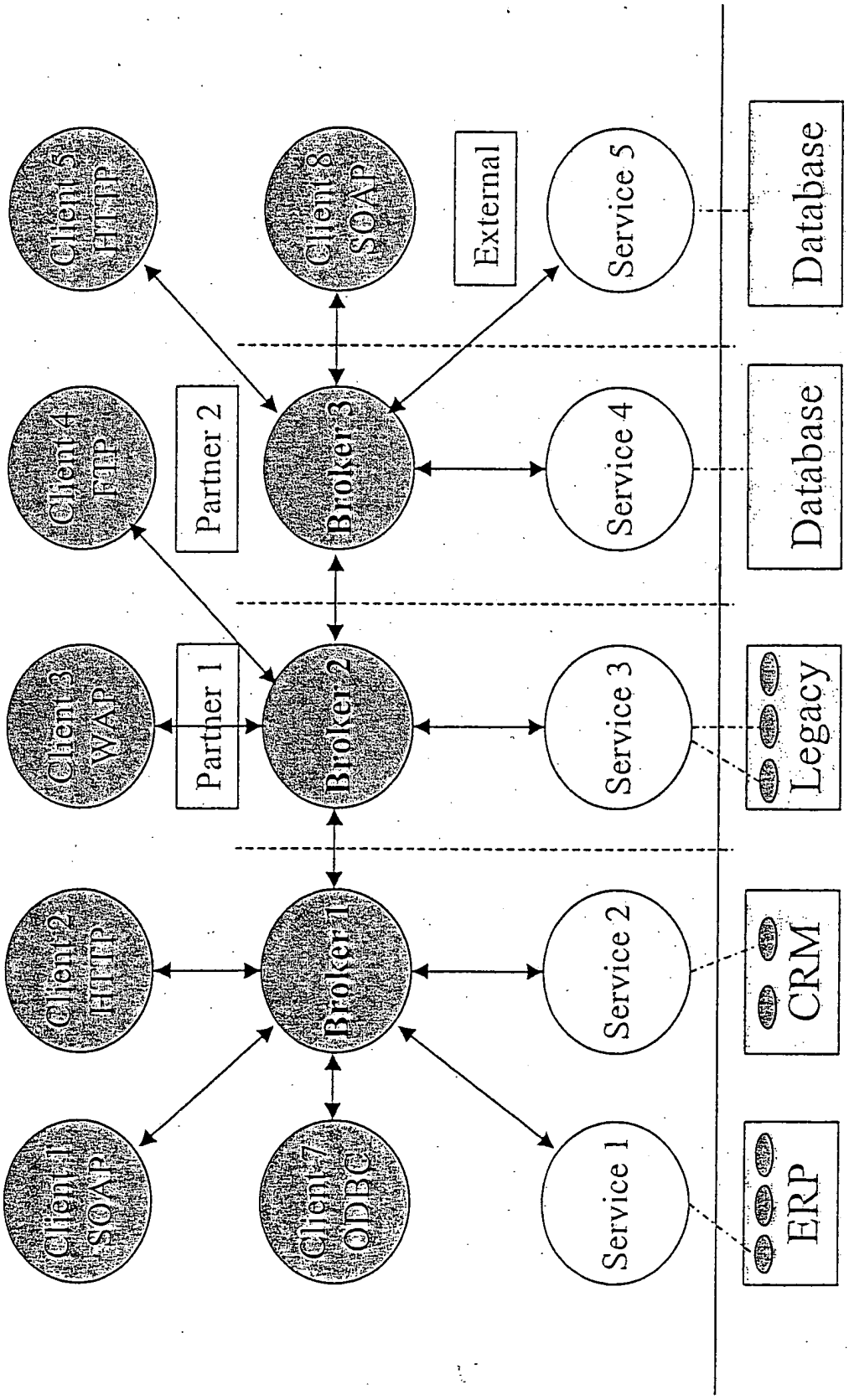
Client 5
HTTP
Client 8
SOAP
External
Service 5
Database
Client 4
HTTP
Partner 2
Broker 3
Service 4
Database
Client 3
WAP
Partner 1
Broker 2
Service 3
Legacy
Client 2
HTTP
Broker 1
Service 2
CRM
Client 1
SOAP
Client 7
ODBC
Service 1
ERP

Figure 13